IN THE SPECIFICATION

Please amend the specification as shown:

Please replace paragraph 44 with the following amended paragraph:

[0044] **Figure 3** illustrates the *M. musculus* α-1,2-mannosidase IA open reading frame nucleic acid sequence ~~(SEQ ID NO:48)~~ (SEQ ID NO:50) and encoded polypeptide sequence ~~(SEQ ID NO:49)~~ (SEQ ID NO:51). The sequences of the PCR primers used to generate N-terminal truncations are underlined.

Please replace paragraph 60 with the following amended paragraph:

[0060] **Figure 19** shows *P. pastoris ALG3* Sequence Comparisons (Blast) ~~(SEQ ID Nos:23-31)~~ (SEQ ID NO:25-32, respectively, in order of appearance)

Please replace paragraphs 149 and 150 with the following amended paragraphs:

[0149] The *OCH1* gene was cloned from *P. pastoris* (**Example 1**) and *K. lactis* (**Example 9**), as described. ~~The nucleic acid and amino acid sequences of the *OCH1* gene from *K. lactis* are set forth in SEQ ID NOs:7 and 8~~. Using gene-specific primers, a construct was made from each clone to delete the *OCH1* gene from the genome of *P. pastoris* and *K. lactis* (**Examples 1** and **9**, respectively). Host cells depleted in initiating α-1,6-mannosyltransferase activity and engineered to produce *N*-glycans having a $Man_5GlcNAc_2$ carbohydrate structure were thereby obtained (*see, e.g.*, **Figures 5**, **6**, and **12**; **Examples 4** and **9**).

[0150] Thus, in another embodiment, the invention provides an isolated nucleic acid molecule having a nucleic acid sequence comprising or consisting of at least forty-five, preferably at least 50, more preferably at least 60 and most preferably 75 or more nucleotide residues of the *K. lactis OCH1* gene ~~(SEQ ID NO: 7)~~, and homologs, variants and derivatives

thereof. The invention also provides nucleic acid molecules that hybridize under stringent conditions to the above-described nucleic acid molecules. Similarly, isolated polypeptides (including muteins, allelic variants, fragments, derivatives, and analogs) encoded by the nucleic acid molecules of the invention are provided. Also provided are vectors, including expression vectors, which comprise the above nucleic acid molecules of the invention, as described further herein. Similarly, host cells transformed with the nucleic acid molecules or vectors of the invention are provided.

Please replace paragraphs 251 and 252 with the following amended paragraphs:

[0251] The *MNN1* gene was cloned from *K. lactis* as described in **Example 9**. ~~The nucleic acid and deduced amino acid sequences of the *K. lactis MNN1* gene are shown in SEQ ID NOs:43 and 44, respectively.~~ Using gene-specific primers, a construct was made to delete the *MNN1* gene from the genome of *K. lactis* (**Example 9**). Host cells depleted in *och1* and *mnn1* activities produce *N*-glycans having a $Man_9GlcNAc_2$ carbohydrate structure (*see, e.g.*, **Figure 12B**). Such host cells may be engineered further using, *e.g.*, methods and libraries of the invention, to produce mammalian- or human-like glycoproteins.

[0252] Thus, in another embodiment, the invention provides an isolated nucleic acid molecule having a nucleic acid sequence comprising or consisting of at least forty-five, preferably at least 50, more preferably at least 60 and most preferably 75 or more nucleotide residues of the *K. lactis MNN1* gene ~~(SEQ ID NO: 43)~~, and homologs, variants and derivatives thereof. The invention also provides nucleic acid molecules that hybridize under stringent conditions to the above-described nucleic acid molecules. Similarly, isolated polypeptides (including muteins, allelic variants, fragments, derivatives, and analogs) encoded by the nucleic acid molecules of the invention are provided. In addition, also provided are vectors, including expression vectors, which comprise a nucleic acid molecule of the invention, as described further herein. Similarly host cells transformed with the nucleic acid molecules or vectors of the invention are provided.